



General	83
Buoyage System	83
Currency	83
Firing Areas	83
Government	84
Holidays	84
Ice	84
Industries	84
Languages	84
Pilotage	84
Regulations	86
Search and Rescue	87
Signals	87
Submarine Operating Areas	88
Time Zone	89
U.S. Embassy	89

General

Germany is located in Central Europe, bordering the Baltic and North Sea, between the Netherlands and Poland, S of Denmark.

The climate is temperate with cool, cloudy, wet winters and summers. There is an occasional, warm tropical foehn wind and relative high humidity.

The terrain is lowlands in the N, uplands in the central portion, and the Bavarian Alps located in the S.

Buoyage System

The IALA Buoyage System (Region A) is in effect. See Chart No. 1 for further IALA Buoyage System information.

Prohibited areas are marked by yellow buoys, sometimes with a red cross, marked "Sperrgebiet."

Submarine cable buoys are painted yellow, are usually spherical, and marked with the letter "K" or word "Kabel" in white. Obstructions outside the buoyed channels are not normally marked.

Winter seamarks are the same color as the fair weather marks, however topmarks may be absent or replaced by bush brooms and straw wisps. Special purpose buoys are barrel-shaped in most cases, but other shapes may be used.

Anchorage buoys are painted red, and may carry a red cylindrical topmark, to mark the limit of an anchorage on the port hand side of a fairway.

The limit of an anchorage on the starboard side of a fairway is marked by black buoys, and may carry a black conical topmark.

The dangerous goods anchorage is marked by yellow buoys with the letter "P" in black.

Military prohibited areas are marked by white buoys with either a blue cross or a blue band, marked "Sperrgebiet," or "Warngebiet," respectively. Yellow buoys with a red cross mark all other prohibited areas.

Dumping grounds are marked by buoys painted yellow at the top and black at the lower part, and may carry a black flag.

Fishing grounds are marked by blue buoys or unpainted poles, either of which may carry a yellow topmark in the shape of a fish.

Currency

The official unit of currency is the deutsche mark, consisting of 100 pfennige.

Firing Areas

North Sea and Baltic Firing Danger Areas have been established for the occasional use of the German Navy.

Local announcements of firing practice are made. Usually there is no obstruction to shipping. Firing may be carried out by day or at night when the visibility is good and the target area is clear. Patrol vessels may warn approaching vessels.

When firing or aircraft exercises are in progress, lightships, signal stations, and patrol vessels in the vicinity display the following signals:

1. By day.—Flags BB vertically.
2. By night.—A red light above two white lights.

A vessel towing a target or targets for firing practice will display:

1. By day.—Two black cones points down in a vertical line.
2. By night.—In addition to the lights prescribed by the International Rules of the Road, two red lights above a white light in a vertical line.

If a vessel approaches the tow too closely, a flare will be shown on the towing vessel. Targets which are being towed at night when firing is not in progress display two white lights, one forward and the other aft, at the same elevation.

When firing is in progress, targets do not display lights. As targets may be towed as far as 1 mile astern of the towing vessel, a wide berth should be given to the tow.

A firing danger area is established N of Zingst and is occasionally closed to shipping. The approximate boundaries are:

- a. 54°26.7'N, 12°44.6'E.
- b. 54°30.2'N, 12°37.7'E.
- c. 54°37.0'N, 12°37.7'E.
- d. 54°37.0'N, 13°00.5'E.
- e. 54°26.6'N, 12°59.5'E.

A military training area, marked by blue and white can buoys, established in Greifswalder Bodden is restricted to shipping. The approximate boundaries are:

- a. 54°10.5'N, 13°47.7'E.
- b. 54°11.4'N, 13°47.7'E.
- c. 54°11.4'N, 13°50.0'E.
- d. 54°10.6'N, 13°51.6'E.
- e. 54°09.5'N, 13°51.9'E.
- f. 54°09.3'N, 13°50.6'E.
- g. 54°09.2'N, 13°49.3'E.

Gunnery, aerial bombing, and torpedo firing occur at various times and locations along the German coast. Shipping is forbidden, or otherwise subjected to special regulations within the firing area. Firing notices may be posted or broadcast, and warning signals made from signal masts or patrol boats. The following signals are made: By day; Two "B" flags of the International Code displayed vertically. By night; A red light above two white lights, vertically.

Ships can pass through the firing area when the first repeater of the International Code is displayed in conjunction with the day signal, or the lights are extinguished.

At night, a tug towing a target sled carries, in addition to tow signals and navigation lights, three lights, vertically, where best seen. The two upper lights are red, the lower light, white. By day, two black cones, disposed vertically, are displayed points down. At night, with an approaching ship nearing the target sled, the tug will show a flared light. The sleds show a white light forward and aft when not being fired upon.

Government

The government is a federal republic. The capital of Germany is Berlin.

Holidays

The following holidays are observed:

Jan. 1, New Year's Day; Good Friday; Easter Sunday; Easter Monday; May 1, Labor Day; Ascension Day; Whit Sunday; Whit Monday; June 17, Day of German Unity; Prayer Day; Dec. 25, Christmas; and Dec. 26, Second Christmas Day.

Ice

The Ice Service, which includes the Ice Breaking Service and Ice Reporting Service, assists vessels in German Baltic waters during ice operations. There are three ice service centers to assist vessels.

Ice Service Center Kiel-Holtenau covers the W Baltic from Flensburg to the W coast of Fehmarn and Kiel Canal. They may be contacted by VHF channel 22.

Ice Service Center Lubeck covers the E Baltic from the W coast of Fehmarn to Ob Buk Light at longitude 11°42'E.

Ice Service Center Stralsund covers the W and S Baltic from Ob Buk Light at longitude 11°42'E to the E German border.

Industries

The main industries include iron, steel, coal, cement, chemicals, machinery, vehicles, electronics, food and beverages, shipbuilding, textiles and petroleum refining.

Fishing is a major industry in Germany. The industry tends to centralize in a small number of the principal ports. The main fishing ports are Bremerhaven, Hamburg, and Cuxhaven.

German trawlers work the year around and may be found in the North Sea, the Skagerrak, Kattegat, and in the vicinity of Iceland and Foroyar (the Faeroe Islands).

Languages

The official language of the country is German.

Pilotage

Pilotage is compulsory, as follows:

1. Tankers carrying gas, chemicals, petroleum, or petroleum products in bulk.
2. Unloaded tankers if not cleaned, degassed, or completely inerted after carrying petroleum or petroleum products with a flashpoint below 35 C.
3. All vessels greater than 90m in length.
4. All vessels greater than 13m in beam.

Masters of tankers up to 55m long and 8m in beam, and other vessels up to 120m long and 19m in beam, may be exempted from pilotage if they meet the following criteria:

1. The master has navigated the same vessel over the particular waterway at least 6 times in the last 12 months.
2. The vessel is equipped with a properly working radar, and VHF fitted with the channels necessary for each pilotage area.
3. The vessel's master is fluent in German.

A central pilot transfer service has been established in the German Bight and is compulsory for the following vessels:

1. Petroleum, gas, and chemical tankers with a length greater than 130m, or a beam greater than 21m, en route to or from the Rivers Ems, Jade, Weser, or Elbe.

2. Bulk carriers, other than oil, gas, and chemical tankers, with a length greater than 220m, or a beam greater than 32m, en route to or from the River Elbe.

3. Bulk carriers, other than oil, gas, or chemical tankers, with a length greater than 250m, a beam greater than 40m, or a draft greater than 13.5m, en route to or from the Rivers Weser or Jade.

4. Other vessels with a length greater than 330m, or a beam greater than 45m, en route to or from the Rivers Jade, Weser, or Elbe.

Pilots board, as follows:

1. German Bight Light Float (54° 11'N., 7° 28'E.)—For vessels en route to or from the Rivers Jade, Weser, or Elbe.

2. Near Lighted Buoy GW-TG (53° 59'N., 6° 21'E.)—For vessels en route to or from the River Ems.

Transfer of the pilot is normally by helicopter, but if weather conditions prevent helicopter operations, or the vessel concerned is unsuitable for a helicopter transfer, then a pilot vessel from Helgoland is used. Requests for pilots should include:

1. Vessel name and call sign.
2. Length, beam, and gross tonnage.
3. ETA at German Bight Light Float or Lighted Buoy GW-TG.
4. Draft.
5. Port of destination.
6. Indication whether an officially approved helicopter landing area or marked winching area is available on board.
7. Location on board of helicopter landing area or marked winching area.

If a pilot vessel has to leave the station because of bad weather, this fact will be announced in navigational warnings.

Tankers of all nationalities coming from sea and entering the territorial waters of the Federal Republic of Germany must complete a check list before the pilot starts his duties. This check list enables the pilot to satisfy himself about the condition of the ship and her equipment for safe operation, or in the case of deficiencies, to enable him to take these into account.

Two copies of the check list are required. One copy of the checklist is for the pilot to examine and send to the responsible authority, while the other is to be retained on board the ship. Failure to complete the check list correctly or to produce it upon request may result in a fine.

Vessels requiring a licensed deep sea pilot in the North Sea, English Channel or Baltic Sea should send a request through their port agents. Requests for German Deep Sea Pilots should be made, as follows:

1. Vessels berthed in German North Sea ports.—6-8 hours before ETD.
2. Vessels berthed in Continental North Sea ports.—24 hours before ETD.
3. Vessels berthed in the United Kingdom North Sea and Channel ports.—48 hours before ETD.

Deep sea pilots may also be requested from pilotage organizations in other countries bordering these areas.

Vessels carrying dangerous cargoes should send an initial report to the appropriate waterway authority 24 hours before ETA or on departure from the last port stating:

1. Vessel's name and call sign.
2. ETA at first reporting point (report date in two figures).
3. Local time (four figures).
4. Nationality.
5. Length and draft.
6. Last port of call and destination.
7. Type of cargo; details and amount of dangerous cargo.
8. Vessels carrying chemicals or liquefied gases: whether vessel carries an IMO-Code Permit for the Construction and Equipment of ships carrying dangerous chemicals or liquefied gases in bulk.
9. Any deficiencies of vessel or cargo.
10. Vessel's owner or agent.

Such vessels may also be required to report when entering German territorial waters, stating type of cargo, tonnage and UN Number, name of owner or agent, and any deficiencies of vessel or cargo.

Before navigating German waterways all vessels required to report to waterway authorities should contact the appropriate authority by VHF stating name, position, dimensions, and destination.

When navigating German waterways all vessels required to report to waterway authorities should report at each listed reporting point stating: name, position, speed, time of passing reporting point.

All vessels required to report must maintain continuous listening watch on VHF channel 16, or other channel as required by the River and Shipping Police, commencing at the time of the first report.

Vessels entering German waterways should have on board a copy of the "Traffic Regulations for Navigable Waterways" pertinent to the navigation of vessels in the territorial waters of Germany.

Seeschiffahrtstrassen-Ordnung (SeeSchStrO) are regulations which are in force in the waters of the Federal Republic of Germany. Some of the more important regulations are listed in the following paragraphs.

A right-of-way vessel is one which is obliged by its draft, length or other characteristic to keep to the deepest part of the fairway.

Traffic regulations (other than in Der Nord-Ostsee Kanal) include the following:

1. Vessels are normally to navigate on the right of the fairway. In specified places mentioned in the text, certain vessels, including right-of-way vessels, are authorized to navigate on the left.
2. Overtaking is normally on the left. If the cooperation of the overtaken vessel is required, sound signals should be made. Overtaking is prohibited at narrow places, near chain ferries, etc.
3. Vessels meeting normally give way to the right. On meeting, right-of-way vessels and certain other hampered vessels have the right of way. On meeting at a narrow place, including a narrow bridge or flood barrage opening, the

vessel which is proceeding with the stream or current has the right of way.

4. Anchoring is prohibited in the fairway, except in designated roadsteads, in narrow places, within 0.15 mile of wrecks, obstructions etc., or in poor visibility, of an overhead cable.

5. The prior approval, to be sought in good time, of the appropriate navigation authority is required for certain unusual operations or passages, including the passage of, nuclear-powered vessels, and extraordinarily large vessels.

6. Especially dangerous cargoes, where referred to in the text, include most explosives, gases and inflammable liquids.

7. Designated Transshipment Roadsteads are located within the waterways of this nation, many of which handle dangerous cargoes. Special regulations are in force for such roadsteads, for which the local authorities should be consulted.

8. During periods of reduced visibility, tank vessels of specific cargo capacity may be prohibited from entering a waterway.

9. Speed restrictions may apply to vessels when in some portions of the waterway.

Regulations

The federal government of Germany has decreed that "the territorial sea of the Federal Republic of Germany shall be extended in the North Sea to enable appropriate action to be taken against the risk of tanker casualties and of pollution by oil of the sea and the coast of the German Bight."

The area of extension is in the vicinity of Helgoland in the German Bight; the outer limits of the extension area of the territorial sea may be best seen on the chart.

Special shipping police regulations have been put into force in the extension area and are stated below.

By derogation from the provisions of Rule 18(d) of the International Regulations for Preventing Collisions at Sea any vessel, other than a vessel not under command, navigating in the area of extension of the territorial sea in the German Bight shall, irrespective of the circumstances of the case, avoid impeding the safe passage of a vessel constrained by her draft and shall take avoiding action in ample time. This provision shall apply in particular, to any vessel approaching a vessel constrained by her draft so as to involve risk of collision.

In practice this provision means, especially for vessels heading E in the traffic separation scheme "Off Terschelling and in the German Bight," that they must not in any way impede those large vessels, especially tankers, which are heading from the traffic separation scheme "German Bight Western Approach" towards Rivers Jade, Weser, or Elbe and which, on account of their draft, have reached the point of no return even before passing traffic separation scheme "Off Terschelling and in the German Bight" and which, after consultation with the pilots, are exhibiting the signals of Rule 28 of the International Regulations for Preventing Collisions at Sea.

The restricted obligation in Rule 18(d) of the Collision Regulations not to impede the safe passage of vessels constrained by their draft has thus been replaced, as far as the area of extension of the territorial sea is concerned, by the clear, unambiguous, and unrestricted obligation not to impede the safe passage of vessels constrained by their draft.

This provision shall apply irrespective of visibility conditions. Therefore, information on any movements of vessels constrained by their draft will be broadcast in good time by the coast radio station "German Bight Traffic" to all vessels navigating in the area of extension of the territorial sea.

These safety broadcasts will be announced at 15 minute intervals on VHF channel 16 and transmitted on VHF channels 80 and 79 immediately following the situation report. As soon as vessels have been informed through such safety broadcasts of the position of vessels constrained by their draft, they shall take avoiding action as prescribed above.

All vessels of a length exceeding 50m, including pushed and towed units, shall be subject to compulsory reporting to shipping police authorities before entering into, and when sailing in, the area of extension of the territorial sea of the Federal Republic of Germany in the North Sea. This regulation in no way affects the obligation of vessels to report to the shipping police authorities before entering onto, and when sailing on, Rivers Ems, Jade, Weser, Hunte, Elbe, or on the Kiel Canal.

In good time before any such vessel enters into the area of extension of the territorial sea, the vessel's name, position, dimensions, and port of destination shall be communicated to the coast radio station "Deutsche Bucht Revier Radio" on VHF channel 80 when the vessel in question passes any one of the following positions:

1. In the case of a vessel proceeding in the TSS "German Bight Western Approach" in an E direction, when passing the "TG 7" Lighted Buoy.
2. In the case of a vessel proceeding in the TSS "Off Terschelling and in the German Bight" or in the associated inshore traffic zone in an E direction, when passing the separation scheme "German Bight Western Approach" in an E direction, when passing the "TG 7" Lighted Buoy.
3. In the case of a vessel enroute from N and heading for a position anywhere between Lightvessel "German Bight" and Helgoland, when passing 54°20'N.

While any such vessel is sailing in the area of extension of the territorial sea, the vessel's name, position, cruising speed, and time of passage shall be communicated to the coast radio station "Deutsche Bucht Revier Radio" on VHF channel 80 when the vessel in question passes any one of the following positions:

1. In the case of a vessel proceeding in the TSS "German Bight Western Approach" in an E direction, when passing the "GW 9" Lighted Buoy.
2. In the case of a vessel proceeding in the traffic separation scheme "Off Terschelling and in the German Bight" or in the associated inshore traffic zone in an E direction, when passing the "TG 17" Lighted Buoy.
3. In the case of a vessel outward-bound from River Weser, when passing No. 1 Lighted Buoy ("Neue Weser" Fairway), or the "A1" Lighted Buoy ("Alte Weser" Fairway).
4. In the case of a vessel outward-bound from River Elbe and proceeding in a W direction, when passing a line connecting Helgoland Lighthouse and the "Nordergrunde N" Lighted Buoy.

While vessels are sailing in the area of extension of the territorial sea, they shall remain constantly available for radio

contact by the coast radio station "German Bight Traffic" on VHF channel 80 or VHF channel 16, even after they have dispatched their reports under the provisions of paragraph 2 or 3 above.

During maneuvers, exercises, or for other causes, the entrance of vessels into river mouths and harbors, as well as departure therefrom, may depend on special conditions or may be entirely prohibited. In such cases a warning signal, consisting of three red balls by day, and three red lights, disposed vertically at night, will be shown from conspicuous positions.

Similar signals will be shown by patrol vessels, which, under certain circumstances, will also carry the pilot flag.

All vessels wishing to enter or leave German territorial waters must, on observing the warning signal, fly the pilot flag and await the arrival of the patrol or pilot vessel. Further instructions can be obtained from the patrol vessel. Should the warning signal be made at night, it is advisable to anchor outside the German territorial limits or remain in harbor.

If hailed by, or if a gun is fired from, the patrol vessel all vessels in sight must immediately stop or heave-to.

Vessels must submit to an examination when required.

The patrol or pilot vessel will give full particulars as to the following:

1. Whether a special examination service is in force, and where it takes place.
2. Whether, and for how long, the harbor entrance or river mouth is closed.
3. Whether special regulations are in force for the navigation of a particular waterway.

Outbound vessels will be given the afore-mentioned information, or their examination will be carried out in the harbor, according to circumstances.

Nature Reserves

The North Sea coast of the Federal Republic of Germany, including large areas of the shallower channels and drying flats off, and inshore of, the German Frisian Islands, is designated a National Park. Entry and activities within the park are controlled. As a general rule, entry into the unpopulated areas is prohibited. Mariners should consult the German authorities for details.

Search and Rescue

The German Society for Rescuing Shipwrecked Persons carries out rescue operations on the German coasts of the North Sea and Baltic Sea.

The Society assumes responsibility for Marine Station 8, also for the search and rescue service of civil aircraft in the maritime territories assigned to it.

The German Society for Rescuing Shipwrecked Persons has an agreement with the Dutch rescue organization for mutual support in sea distress cases in the North Sea coast area, while in the case of distress cases in the Baltic Sea, an agreement exists with the German Red Cross, maritime emergency service in Dresden.

The German Society for Rescuing Shipwrecked Persons depends upon voluntary help for the maintenance of its rescue equipment and appeals for voluntary participation in the maritime emergency reporting service, so that every

emergency case is brought to the attention of the administration of maritime distress cases as soon as possible.

The emblem of the Society is a white flag, black bordered, with red Hanseatic cross or a corresponding pennant.

The Emergency Maritime Administration is located at the headquarters of the Society in Bremen, Werder-Strasse. It is always activated and can be reached by telephone and telegraph. It alerts the best rescue station in case of distress or accident and takes the following steps to implement rescue operations:

1. Notifies the pertinent coastal radio station, to inform shipping.
2. Notifies the nearest marine and navigation department.
3. Requests help from airplanes and helicopters if necessary or useful for rescue operations.

Emergency maritime observers and main emergency maritime observers are on duty especially at the large lighthouses and some other important coastal points. They not only take care of transmitting reports and information concerning distress cases, but are also active locally, to promote rescue operations, order medical assistance and attend to the persons rescued.

The emergency maritime rescue cruisers and emergency rescue boats of the German Society for Rescuing Shipwrecked Persons are continuously berthed in the ports or specified locations at sea and can be reached in port by telephone or at sea by radio telephone (2182 kHz or 156.8 MHz). The rescue cruisers are vessels more than 20m in length, which can make up to 20 knots.

The emergency maritime rescue boats are likewise seaworthy vessels with an operating range of several hundred miles and a speed of 8 to 9 knots.

Signals

Vessels entering German waterways should have on board a copy of "New Traffic Regulations on German Waterways for Seagoing Vessels." Some of the more important signals from these regulations are described below.

The new traffic signs are mostly self-evident, those prohibiting anything consist of white rectangular daymarks with a red border. The prohibited item is shown as a black symbol crossed by a red diagonal stripe. A bollard or letter P indicates that mooring is prohibited.

The signal indicating that a channel is closed is a black ball over two black cones, points together, or a red rectangular daymark with a white band, by day; and three vertical lights at night, red, over green and white.

The L flag from the International Code, or that letter in Morse Code sounded by a local authority craft, indicates that the vessel addressed should stop.

The passage to be used through bridges is indicated by one or two yellow diamond daymarks close together, or its limits are marked by diamond daymarks painted red and white vertically, the outer halves being red.

Pilot signals are in accordance with the International Code of Signals.

Vessels show the flag of the Federal Republic of Germany and a rectangular green flag by day; by night they show four green vertical lights in addition to the lights prescribed by the International Rules of the Road.

Quarantine signals are as provided in the International Code of Signals. In addition, at night a red light over a white light signifies: "I have not received pratique." These two lights must be at least 2m apart and visible all around the horizon. This signal may be set only inside the harbor limits.

A fire alarm is a steady tone on the siren for 1 minute interrupted twice.

A disaster alarm is a twice interrupted steady tone on the siren of 1 minute, then steady tone of 1 minute after a pause of 12 seconds.

In order to indicate that distress signals made by a ship or aircraft have been seen, and that help is coming, by day the flag of the Society for Saving Shipwrecked Persons will be displayed at the flagstaff on the lifesaving station, and, if the station is concealed from view, a signal bomb, which will rise to a height of about 150m and then detonate, will be fired on the shore. This signal can also be used at night, together with the general night signal, made by firing a light rocket.

Further, the lifeboats, when proceeding by day to a ship in distress, will from time to time fire white rockets and/or white stars, and, in addition, will, at night, burn white flares.

German coastal signal stations and lightvessels answer distress signals at sea, when observed, as follows:

1. By day.—Suitable flag signals from the International Code of Signals.
2. By night.—Five white light balls fired at intervals of about 1 minute. In case of necessity this signal will be repeated.

Visual storm warning signals are not used.

In the event of an obstruction in the fairways of German waters, the following signals will be shown in the vicinity:

1. By day.—Two black balls over a cone, point down, disposed vertically.
2. By night.—Two red lights over a green light, disposed vertically.

In German waters, moored or fixed nets are usually marked by flags, one at every sixth net and two at the beginning and end of each line of nets. The outer end of a line of moored or fixed nets is marked by a white light.

Submarine Operating Areas

German Submarine Operating Areas are located in the North Sea (off Deutsche Bucht) and in the Baltic off Flensburger Forde (N Surface Area) and Eckernförder Bucht (S Surface Area); for limits see the charts. Ships and fishing vessels are requested to use extreme caution when vessels are operating in these areas. Submarines of the German Navy show the following lights when proceeding on the surface:

1. A blue light at the bow, visible all round for a distance of 1 mile.
2. A white light at the masthead, visible from right ahead to two points abaft the beam on either side for a distance of 5 miles.
3. On the starboard side two green lights and on the port side two red lights, disposed vertically, respectively, and visible in accordance with the rules governing the exhibition of side lights.
4. A stern light as laid down in the Rules for Preventing Collisions at Sea.

5. An additional flashing yellow light above the white masthead light visible all around for at least 3 miles.

Submarines are usually not in a position to carry their running lights in the prescribed order and height. Since the lights are attached close together at the conning tower and the second masthead light often is missing, the danger arises that a submarine surfaced will be taken at night for a much smaller vessel, and accordingly, its speed will also be underestimated. Submarines require special attention during their surfacing.

It is possible that a surfacing submarine is not completely able to maneuver, and also is not in a position to show immediately the signals prescribed for ships unable to maneuver. Many submarines announce their surfacing by signalling with smoke candles or flares, some also use a searchlight, with which they cast rays on the water surface from below.

Submerged submarines are often accompanied by other vessels, which call attention to the exercises below the surface with the international signal "NE 2." Vessels so marked should be avoided as far away as possible. If one should be forced to approach such a vessel, nevertheless, it must be done at slow speed. The escort vessel will point out the danger zone with flags or megaphone. A sharp lookout must be kept for periscopes. When submarines dive so far below that they cannot show the periscope any longer, they announce their position occasionally with a smoke candle, which develops a strong smoke track when it reaches the water surface.

German sunken submarines which can no longer surface under their own power, need immediate assistance and identify themselves, if possible, with the following signals:

1. By rising marker buoys which are attached to the submarine with a wire.
2. By shooting off signals, which give off white or yellow smoke or flames on the water surface (during the day yellow smoke signals are used, if possible).
3. By pumping out fuel oil or engine oil.
4. By releasing air.

When such signals are observed and especially when a marker buoy is sighted, it should be reported immediately by the most expedient means, giving, if possible, in that connection, the name or nationality of the submarine, if the marker buoy carries such an indication. The most accurate possible ship's position is important at that juncture. If one finds that the marker buoy is drifting and is no longer attached to the submarine, this must be added to the report.

With water depths of more than 200m, one can assume that a sighted marker buoy is drifting, since the buoy wire is usually not longer; with lesser depths one can observe it by carefully hauling up the wire.

Care must be taken not to break the buoy wire, and one must not make fast any vessel to the buoy or to the wire. A drifting marker buoy may also have detached itself from a submarine during the voyage and therefore does not point to an accident in every case. As long as no rescue vessel has arrived at a sunken submarine, every other vessel can contribute to the rescue of the submarine crew and should not, if possible, leave the scene of the accident. Since the living conditions quickly deteriorate in a sunken submarine, the crew may be forced to abandon the submarine before the arrival of the rescue vessels.

One should therefore stay at such a distance from the scene of the wreck that one does not impede the vertically ascending

survivors, and keep a boat clear for rescuing them. In most cases, the survivors require medical assistance and pressure chambers, which must be prepared or called in, as far as possible. To notify the submarine crew of the presence of an assisting vessel, very small detonators are employed, however, only at a minimum distance of 0.25 mile from the submarine, so that persons leaving the submarine and rising in the water, will not be injured.

One can also knock vigorously against the ship's hull below the water line with a hard object, or switch on the echo sounding machines. These signals should be repeated from time to time and may possibly be answered by the submarine by releasing pyrotechnics, which develop flares or smoke on the water surface. Most submarines are equipped with two marker buoys, of which one is attached forward, the other aft. In many cases, the marker buoys are provided with a quick

flashing light or with a telescope aerial and an automatic emergency transmitter.

Besides these marker buoys, there are long cylindrical buoys with telescope aerials, which are dropped by airplanes and serve as sonic buoys for tracking down submarines. They should not be confused with the marker buoys.

Time Zone

The Time Zone description is ALPHA (-1).

U.S. Embassy

The U.S. Embassy is situated at Neustaetische Kirchstrasse 4-5, 10117, Berlin.

The mailing address is PSC, Box 1000, APO AE 09265.